

AMENDMENTS TO THE CLAIMS

1 (Currently amended). An interface for association with an electrode structure having a circumferential array of electrodes adapted to create a corresponding circumferential pattern of lesions, the electrode structure being associated with a sensor adapted to monitor a surface tissue temperature condition of tissue heated by each of the electrodes, the electrodes, in use, being deployed in contact with a tissue region, the interface comprising

an input adapted to be attached to the sensor,

a display screen, and

an operating system to generate concurrently viewable images on the display screen, the viewable images comprising an idealized image of the electrode structure which spatially models the particular circumferential array of electrodes and a second image that displays concurrently for each electrode changes in the monitored surface tissue temperature at each electrode over time.

2 (Previously added). An interface as in claim 1

wherein the second image comprises a numeric display of surface tissue temperature magnitude.

3 (Previously added). An interface as in claim 1

wherein the second image comprises a color display that varies according to relation of the surface tissue temperature condition to prescribed criteria.

4 (Previously amended). An interface as in claim 1, further comprising

a data output to process the monitored surface temperature condition as data for storage or manipulation.

5 (Previously added). An interface as in claim 4

wherein the data output communicates with a storage medium to save the data.

6 (Previously added). An interface as in claim 4

wherein the data output communicates with a printer to print the data.

7 (Previously added). An interface as in claim 1

wherein the viewable images on the display screen include an animated image.